



KANSAS

DEPARTMENT OF HEALTH AND ENVIRONMENT

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HHW Standard Permit Format Explanation and Instructions

As required by KAR 28-29-1107, all permit applications to establish a household hazardous waste facility must include a Facility Design Plan, Operating Plan, and Closure Plan. The general purpose of these plans is to ensure that the facility's building is properly designed to safely process and store hazardous waste, and demonstrate the applicants understanding and ability to properly manage a household hazardous waste facility. A detailed outline referred to as the *HHW Standard Permit Format* has been developed to guide applicants through the permitting process.

The *HHW Standard Permit Format* is a working outline with chapters, sections, and subsections in bold print. The final permit should follow this format and numbering convention. Each chapter, section, and subsection which appears in this outline should appear in the permit with its corresponding number. This format is flexible since subsections can be added to existing sections if need be, but remember the number of a heading should not be changed from that which appears on the *HHW Standard Permit Format*.

Beneath each chapter, section, and subsection is a Kansas Administrative Regulation citation in italics. This citation means that the particular regulation requirement cited should be satisfied in that particular section or subsection. In addition to, or in place of the regulation citation, there are other requirements which should be satisfied in that section as well.

This outline has been presented in an indented staggered format to emphasize under what sections certain information should be placed. Submitted plans should have all chapters, sections, and subsections aligned to the left margin, and should not be in the staggered format like the outline. All headings and section numbers should be in bold.

Sometimes plans need to be revised or updated to reflect changes in day to day operations. The most common reasons for revising a facility's plan include: changes in personnel and their duties, a change in the disposal contractor, a facility building and program expansion, emergency response plan modifications, and the addition of a Small Quantity Generator (SQG) program. As a way of preparing for these possible future revisions, applicants should space out sections and subsections in such a way that paragraphs are not split up by page breaks. This means applicants should end a section or subsection on the same page it started. If a section or subsection is longer than one page and must continue over to the next page, no other information should be put on that second page and the next section should start at the top of the next page. Please do not number pages, the section numbers will be used for reference.

HHW Standard Permit Format

1 **FACILITY DESIGN PLAN** *KAR 28-29-1107(a)(1)*

For all of the following sections relating to the facility design, the use of pictures to enhance descriptions of the facility is highly encouraged but not required.

1.1 **TYPE, SIZE, AND LOCATION OF FACILITY** *KAR 28-29-1107(a)(1)(A)*

1.2 **REGIONAL MAP SHOWING SERVICE AREA** *KAR 28-29-1107(a)(1)(B)*

1.3 **VICINITY MAP** *KAR 28-29-1107(a)(1)(C)*

1.3.1 **Natural and Man-made Features within 0.5 Miles of Facility** *KAR 28-29-1107(a)(1)(C)(i)*

1.3.2 **Adjacent Zoning and Land Use** *KAR 28-29-1107(a)(1)(C)(ii)*

1.3.3 **100 Year Flood Plain** *KAR 28-29-1107(a)(1)(C)(iii)*

1.4 **TOPOGRAPHIC MAP** *KAR 28-29-1107(a)(1)(D)*

1.5 **SITE PLAN** *KAR 28-29-1107(a)(1)(E)*

1.5.1 **Utilities** *KAR 28-29-1107(a)(1)(E)(i)*

1.5.2 **Storm and Sanitary Sewers** *KAR 28-29-1107(a)(1)(E)(ii)*

1.5.3 **Right-of-Ways** *KAR 28-29-1107(a)(1)(E)(iii)*

1.5.4 **On-Site Structures, Paved Areas, Drainage, Signs, Entrance Gate, Fencing** *KAR 28-29-1107(a)(1)(E)(iv)*

1.5.5 **Traffic Flow** *KAR 28-29-1101(a)*

1.6 **DETAILED PLANS** *KAR 28-29-1107(a)(1)(F)*

1.6.1 **Building Elevation and Plan View** *KAR 28-29-1107(a)(1)(F)(i)*

1.6.2 **Building Plans** *KAR 28-29-1107(a)(1)(F)(ii)*

1.6.2.1 **Shelving**

1.6.2.2 **Floor and Roof Construction** *KAR 28-29-1101(b)* *KAR 28-29-1101(c)*

1.6.2.3 Electrical and Fire Prevention Fixtures
1.6.2.4 Ventilation
1.6.2.5 Office Area

1.6.3 Designated Areas for HHW Activities

KAR 28-29-1107(a)(1)(F)(iii)

1.6.4 Entrance Area Gates, Fencing and Signs

KAR 28-29-1107(a)(1)(F)(iv)
KAR 28-29-1102(d)

1.6.5 Secondary Containment

KAR 28-29-1101(d)

Provide secondary containment for all HHW stored for disposal or recycling. The secondary containment shall be capable of containing either 110 percent of the volume of the largest container or 10 percent of the total volume of all the containers, whichever is greater.

2 OPERATING PLAN

KAR 28-29-1107(a)(2)

2.1 ON-SITE ACTIVITIES

KAR 28-29-1107(a)(2)(A)

2.1.1 Receipt of Waste

The facility may not receive waste from business, commercial organization, or other persons that are considered EPA or Kansas generators as defined by K.A.R. 28-31-2. Only wastes from households and farms may be accepted. Waste from Small Quantity Generators as defined by K.A.R. 28-31-2(e) may be accepted, provided the requirements of section 2.6 *Procedures For Identifying and Managing Small Quantity Generator Waste* are met and approved.

Facilities may not accept explosives, infectious wastes, and radioactive wastes.

Types of waste to be accepted.

Amount of waste to be accepted from each participant.

Procedures for handling unknown or large quantities of wastes.

2.1.2 Segregation of Waste

Method of characterizing wastes accepted.

Each waste must be handled in a manner appropriate to its characteristics and hazards.

KAR 28-29-1102(a)(1)(A)

Place the NHHW in the designated area, as described in the facility operating plan, within one week after it is received;

KAR 28-29-1102(b)(1)(A)

Place the HHW in the designated area, as described in the facility operating plan, within one week after it is received. Sort and segregate all HHW, except HHW that will be distributed for use, by U.S. department of transportation hazard class or division;

2.1.3 Packaging of Waste

Containers must be made of materials which are compatible with the waste to be stored.

Incompatible wastes must never be packaged together.

Containers holding waste must not be opened, handled, or stored in a manner which may rupture the container and cause it to leak.

Containers must be protected from excessive heat or cold and from large temperature fluctuations or wastes must be packaged so that the contents of containers that break will not escape.

Description of container(s) and other packaging materials.

Wastes received in corroded or leaking containers must be packaged or over packed.

All wastes are to be packaged, labeled, and manifested in accordance with K.A.R. 23-31-4(d) and (e).

2.1.4 Storage of Waste

Each waste must be stored in a manner appropriate to its characteristics and hazards.

Procedures for storing wastes prior to off-site disposal.

Length of time waste will be stored.

KAR 28-29-1102(c)

Storage. Each HHW facility operator shall maintain the quantity of stored material at or below the facility's permitted storage capacity.

What is the permitted storage capacity (PSC) of the facility? The PSC is determined by one of two methods, both of which are directly related to the secondary containment capacity of the facility. The easiest method is to calculate the volume of your facility's secondary containment area in cubic feet and then multiply this volume by 74.8. This will give the facilities PSC in gallons. The other method is to take the volume of the largest storage container, usually 55 Gallons, and multiply that volume by 11. Both methods should be calculated and compared. The PSC of the facility is the larger of the two volumes. Note, if the PSC calculated above is larger than what can be actually stored in the containment area, due to physical limitations such as floor space, then the facilities PSC is determined by the volume of material which can be properly stored in the containment area. Facilities which use drum containment pallets or pre-engineered concrete buildings, designed for the purpose of storing hazardous waste, are usually limited by storage space and not secondary containment; therefor these facilities are not required to go through the above calculations and can determine their PSC based on available storage capacity.

2.1.4.1 NHHW

KAR 28-29-1102(a)(1)(B)

Ensure that each NHHW storage container or each NHHW storage area has a label or sign designating its contents;

KAR 28-29-1102(a)(1)(D)

Store NHHW to be distributed for use in a manufacturer's original container or, for latex paint, in a compatible container provided by the HHW facility. Each container that will be distributed for use shall be labeled, closed, and nonleaking.

2.1.4.2 HHW

KAR 28-29-1102(b)(1)(B)

Except for HHW that will be distributed for use, mark each HHW storage container or each segregated HHW storage area according to

U.S. department of transportation hazard class or division.

KAR 28-29-1102(b)(1)(C)

Keep all storage containers that are in direct contact with HHW closed, except when adding or removing waste;

KAR 28-29-1102(b)(1)(E)

Store HHW that will be distributed for use in a manufacturer's original container. Each container that will be distributed for use shall be labeled, closed, and nonleaking.

Containers holding a waste must always be closed during storage, except when it is necessary to add or remove waste.

2.1.5 Bulking Activities

Types of materials that are bulked.

Procedure for bulking activities and type of containers used.

2.1.6 Distribution of Useable Products

KAR 28-29-1102(a)(2)(A)

NHHW may be distributed for use in a manner equivalent to its originally intended purpose.

KAR 28-29-1102(b)(2)(A)

HHW may be distributed for use in a manner equivalent to its originally intended purpose.

KAR 28-29-1102(b)(1)(E)

Store HHW that will be distributed for use in a manufacturer's original container. Each container that will be distributed for use shall be labeled, closed, and nonleaking.

2.1.7 Recycling of Waste

Describe recycling activities (Oil, Antifreeze, Batteries etc...)

2.1.8 Disposal of Waste

EPA Identification Number for the site.

2.1.8.1 NHHW

KAR 28-29-1102(a)(2)(B)

NHHW may be disposed of in a permitted municipal solid waste landfill. However, latex paint and all other liquids shall be disposed of in a permitted municipal solid waste landfill only if one of the following conditions is met:

(i) The paint or other liquid is solidified.

(ii) The paint or other liquid is in the original container, and the volume of the container is no greater than five gallons.

KAR 28-29-1102(a)(2)(C)

NHHW may be disposed of in a sanitary sewer connected to a publicly owned treatment works with written authorization from the operators of the publicly owned treatment works.

2.1.8.2 HHW

Proposed methods for disposing of wastes.

Procedures for documenting disposal of wastes.

Identify of transportation and disposal contractor to be used.

All wastes are to be packaged, labeled, and manifested in accordance with K.A.R. 28-31-4(d) and (e).

KAR 28-29-1102(b)(2)(B)

All HHW that is transferred for treatment, storage, or disposal shall be transferred to a permitted hazardous waste treatment, storage, or disposal facility by a registered hazardous waste transporter.

KAR 28-29-1102(b)(2)(C)

All HHW that is transferred for treatment, storage, or disposal shall be manifested as hazardous waste as described in K.A.R. 28-31-4 (d), with the following changes:

(i) For the purposes of paragraph (b)(2)(C) of this regulation, "Kansas or EPA generator" shall be replaced with "HHW facility operator," and "hazardous waste" shall be replaced with "HHW" in K.A.R. 28-31-4 (d).

(ii) All applicable hazardous waste codes for each waste shall be listed on the manifest, using all available information. HHW facilities shall not be required to submit samples for laboratory testing in order to determine hazardous waste codes.

KAR 28-29-1102(b)(2)(E)

All HHW that is transferred for treatment, storage, or disposal shall be prepared for transportation off-site as specified in K.A.R. 28-31-4 (e). For the purposes of this paragraph, "Kansas or EPA generator" shall be replaced with "HHW facility operator," and "hazardous waste" shall be replaced with "HHW" in K.A.R. 28-31-4 (e).

2.1.8.3 Land Disposal Restrictions

KAR 28-29-1102(b)(2)(D)

All HHW that is transferred for treatment, storage, or disposal shall be subject to the hazardous waste land disposal requirements specified in K.A.R. 28-31-14.

2.1.8.4 Treatment, Storage and Disposal Exemptions

KAR 28-29-1102(b)(2)(F)

The requirements of paragraphs (b)(2)(B) through (b)(2)(E) of this regulation shall not apply to the following wastes:

(i) HHW that is transferred to a universal waste facility and packaged and labeled in accordance with K.A.R. 28-31-15;

(ii) antifreeze that is transferred to a commercial collector under the conditions of an agreement to recycle the antifreeze;

(iii) HHW that is disposed of in the sanitary sewer connected to a publicly owned treatment works with written authorization from the operators of the publicly owned treatment works. HHW shall not be discharged to storm sewers or septic systems;

(iv) containers that have been emptied to the fullest practical extent and are disposed of in a permitted municipal solid waste landfill;

(v) HHW that is transferred between HHW facilities; and

(vi) other waste, as approved by the department.

2.2 OFF-SITE ACTIVITIES

KAR 28-29-1107(a)(2)(B)

2.2.1 Mobile Collection

Describe mobile collection activities if any.

KAR 28-29-1103(a)

Clearly mark "Household hazardous waste" on both sides of the mobile collection unit;

KAR 28-29-1103(b)

Separate all HHW by USDOT hazard class or division before transport.

KAR 28-29-1103(c)

Lab pack or overpack the household waste in containers meeting the USDOT manufacturing and testing specifications for transportation of hazardous materials, as adopted by reference in K.A.R. 28-31-4 (e).

KAR 28-29-1103(d)

label the containers with a USDOT hazard class or division label or sign;

KAR 28-29-1103(e)

seal and secure all containers for transport;

KAR 28-29-1103(f)

during transportation, carry a bill of lading describing the USDOT hazard class or division and the approximate quantities of the contents of the mobile collection unit.

2.2.2 Curbside Collection

Describe collection program if any. Curbside collection does not include one time collection events which are considered mobile collection or collection from satellites.

2.2.3 Satellite Facilities

List all satellite facilities and give the name and number of the contact person.

KAR 28-29-1104(b)(1)

The HHW satellite facility shall be described in the approved operating plan of the permitted HHW facility or facilities with which the satellite HHW facility is associated.

2.3 FACILITY INSPECTIONS

KAR 28-29-1102(a)(1)(C)

When NHHW is present, inspect all NHHW storage areas weekly to assess waste volume and container integrity, and document these inspections in a log that is dated and either signed or initialed by the person who conducted the inspection.

KAR 28-29-1102(b)(1)(D)

When HHW is present, inspect all HHW storage areas weekly to assess waste volume and container integrity, and document these inspections in a log that is dated and either signed or initialed by the person who conducted the inspection.

A copy of the inspection form used should be included in this section.

2.4 PROCEDURES FOR MANAGING USED OIL

KAR 28-29-1100(c)

Used oil. Each HHW facility that accepts used oil from household do-it-yourselfers or exempt farmers shall manage the used oil in accordance with K.A.R. 28-31-16 upon receipt of the used oil at the HHW facility's central collection center. Each HHW facility that accepts used oil from businesses shall manage the used oil in accordance with K.A.R. 28-31-16 from the point of generation.

2.5 PROCEDURES FOR HANDLING IGNITABLE OR REACTIVE WASTE

KAR 28-29-1107(a)(2)(C)
the procedures for handling ignitable or reactive waste.

2.6 PROCEDURES FOR IDENTIFYING AND MANAGING SMALL QUANTITY GENERATOR WASTE

All facilities that want to accept small quantity generator (SQG) waste must submit the *Permit Modification Request For A Household Hazardous Waste Facility To Accept Hazardous Waste From Small Quantity Generators*. This request must be reviewed, approved, and a permit amendment issued before any SQG waste may be accepted by the facility.

KAR 28-29-1100(d)
Small quantity generator (SQG) waste. Each HHW facility that is permitted to accept SQG waste shall manage all SQG waste that is not hazardous waste in the same manner as that for nonhazardous household waste and shall manage all SQG hazardous waste in the same manner as that for HHW.

KAR 28-29-1107(a)(2)(D)
The procedures for identifying and managing small quantity generator waste.

2.7 DUTIES AND RESPONSIBILITIES OF FACILITY PERSONNEL

KAR 28-29-1107(a)(2)(E)
The duties and responsibilities of facility personnel.

2.8 TRAINING PROGRAM AND REQUIREMENTS FOR PERSONNEL

KAR 28-29-1102(e)
Training. All HHW facility managers, employees, and volunteers that are responsible for sorting, segregating, or processing HHW shall receive a minimum of 24 hours of classroom training related to the proper handling of hazardous materials and shall receive a minimum of eight hours of annual refresher training. Education or experience may be substituted for the required training, subject to departmental approval. No person shall sort, segregate, or process HHW without on-site supervision before receiving this training.

KAR 28-29-1107(a)(2)(F)
The training program and requirements for the different types of facility personnel.

2.9 EMERGENCY RESPONSE PLAN

KAR 28-29-1100(e)
Other hazardous waste. Any HHW facility may accept hazardous waste from a source other than a household or an SQG in an emergency, if the facility's operating plan contains procedures to follow in such an emergency.

KAR 28-29-1107(a)(2)(G)
The emergency response plan for events including spills, fires, equipment failure, power outages, natural disasters, receipt of prohibited materials, and other similar interruptions of normal activities.

2.10 REPORTING AND RECORD KEEPING

KAR 28-29-1105

2.10.1 Reports

KAR 28-29-1105(a)
The owner or operator of each HHW facility shall submit an annual report to the department on a form furnished by the department.

2.10.2 Records

KAR 28-29-1105(b)
The owner or operator of each HHW facility shall maintain a copy of the

approved design plan, closure plan, and all modifications to the plans, at the facility or at another location designated in the facility operating plan, until the facility closes.

KAR 28-29-1105(c)

The owner or operator of each HHW facility shall maintain at the facility a copy of the approved operating plan and all modifications to the plan, until the facility closes.

KAR 28-29-1105(d)

The owner or operator of each HHW facility shall maintain the following records at the facility or at another location designated in the facility operating plan, for at least three years. (1) Copies of the annual report; (2) training records; (3) bills of lading; (4) hazardous waste manifests; (5) land disposal restriction notifications; (6) weekly inspection records; and (7) notification of changes to approved design, operations, and closure plans.

2.11 PLAN REVISIONS AND MODIFICATIONS

KAR 28-29-1107(b)

Modifications to plans. The owner or operator shall notify the department, in writing, of all modifications to the approved plans before the implementation of modifications. Modifications submitted to the department shall be effective 28 calendar days after the date the modification notice is received by the department, unless the department notifies the owner or operator that the modification will require further review before it can be approved. Changes to approved plans shall not conflict with any provision of K.A.R. 28-29-1100 through K.A.R. 28-29-1107.

3 CLOSURE PLAN

KAR 28-29-1106(c)

KAR 28-29-1107(a)(3)

3.1 REMOVAL AND DISPOSAL OF WASTE

KAR 28-29-1107(a)(3)(A)

The procedure for removing and disposing of waste at closure.

3.2 CLEANING OF FACILITY

KAR 28-29-1107(a)(3)(B)

The procedure for cleaning the facility;

3.3 CLOSURE SCHEDULE

KAR 28-29-1107(a)(3)(C)

The schedule for closure.

KAR 28-29-1106(a)

Notify the department at least 60 days before beginning closure.

KAR 28-29-1106(b)

Remove all household waste within 90 days after last receiving waste.

3.4 CLOSURE COST ESTIMATE

KAR 28-29-1107(a)(3)(D)

The closure cost estimate on a form supplied by the department.